PFEIFFER, N. E. 1922. Monograph of the Isoëtaceae. Ann. Missouri Bot. Gard. 9:79–233.
SMALL, J. K. 1932. Ferns of Florida. Science Press, New York, NY.
TAYLOR, W. C., R. H. MOHLENBROCK, and J. A. MURPHY. 1975. The spores and taxonomy of Isoëtes butleri and I. melanopoda. Amer. Fern J. 65:33–38.
UNDERWOOD, L. M. 1900. Our Native Ferns and Their Allies. Henry Holt, New York, NY.

REVIEW

Flora Malesiana, Series II-Pteridophyta, volume 2, part 5, Thelypteridaceae,

by R. E. Holttum. Pp. 331-599, including index and addenda for entire volume, plus pp. 1-20, contents and dedication. 1982. Martinus Nijhoff, BV, The Hague, Netherlands. \$63.00.—Historically, no other group of ferns has been subjected to such varied circumscriptions, both of the family and genera; moreover, species have been notoriously under-collected, ill-defined and confused, and their relationships misunderstood. Part of the reason is their mundane (cringe) and superficially similar look that causes collectors to sample one or a few and pass by the rest. Another reason is that few taxonomists have bothered to look at them closely. The first who did look was Carl Christensen, to whom Holttum appropriately dedicates this volume; but Christensen concerned himself mostly with Neotropical species. In 1963, Ching presented a revised classification of Old World genera that provided a springboard for Holttum's many precursory revisions culminating in the present work. The sheer size and complexity of Thelypteridaceae have made Holttum's task formidable. This family is probably the largest in ferns, with almost 1000 species. In the Flora Malesiana region alone Holttum treats 440 species in 22 genera. The number of new taxa (75 species, 18 varieties) is staggering and reminds us how poorly known are the tropical floras and how urgent it is to preserve what little is left. In Sphaerostephanos, with 152 Malesian species, 43 are known only from the type and many additional species are not much better represented in herbaria. But Holttum's most important contribution is not the number of species named and redefined; it is the understanding of the large natural groups of species. Here, he has brought order from chaos. Doubtless there will be taxonomists, including myself, who will prefer to assign lower rank to some of Holttum's genera. But his circumscriptions of natural groups are likely to survive intact or with only minor redefinition.

At least 13 new chromosome counts are embedded in the work; they may well be overlooked by compilers of chromosome indices. The most interesting, n = 66 for a species of *Coryphopteris*, is a new base number (x = 33) for Thelypteridaceae and may lend support to Holttum's contention of a relationship between this family and Cyatheaceae.

The magnitude, originality, and scholarship shown in this work are truly impressive and culminate a brilliant career. But Holttum is already turning to other ambitious projects and one wishes him many more years of taxonomic insight. —Alan R. Smith, Herbarium, Department of Botany, University of California, Berkeley, CA 94720.